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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,466	12/16/2003	Gregg M. Duthaler	H-361	1465

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EXAMINER	
NGUYEN, KEVIN M	
ART UNIT	PAPER NUMBER
2629	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/707,466	DUTHALER ET AL.	
	Examiner	Art Unit	
	Kevin M. Nguyen	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 January 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) *12-29* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *2/28/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Response to election filed on 1/31/2007, applicant's election without traverse of Group I, claims 1-11 are acknowledged.

This application contains claims 12-29, drawn to a nonelected invention without traverse, filed on 1/31/2007, which are withdrawn from the consideration. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claims 12-29 are withdrawn, and claims 1-11 are examined. Thus, claims 1-11 are currently pending in the application. An action follows:

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1-11** are rejected under 35 U.S.C. 102(b) as being anticipated by Te Velde et al (US 4,681,403) hereinafter Te Velde.

4. **As to claim 1**, Te Velde teaches a backplane for an electro-optic display *(the array of associated row electrodes 4 and column electrodes 7 form the backplane of the display, as discussed in col. 5, lines 12-42)*, the backplane comprising:

a pixel electrode, a voltage supply line arranged to supply a voltage to the pixel electrode *(a picture electrode 3, a voltage difference Vs+Vd is across the series arrangement of the capacitor of a picture element and the capacitor of switching element via a scan electrode 4 and a data electrode 7, col. 6, lines 55-59);*

a micromechanical switch disposed between the voltage supply line and the pixel electrode *(a micromechanical leaf spring 5 arranged between the scan electrode 4 and the picture electrode 3, as disclosed in fig. 7b, col. 7, lines 60-65)*, the micromechanical switch having an open state, in which the voltage supply line is not electrically connected to the pixel electrode, and a closed stated, in which the voltage supply line is electrically connected to the pixel electrode *(as discussed in col. 6, line 44 through col. 7, line 47).*

As to claim 2, Te Velde teaches *a* backplane according to claim 1 wherein the micromechanical switch comprises a cantilever beam capable on moving into and out of contact with a first electrode, and a second electrode arranged to move the cantilever beam *(the micromechanical leaf spring 5, a first electrode is the picture electrode 3, a second electrode is the scan electrode 4, and an extra contact point 17, as discussed in fig. 7a, col. 7, lines 48-52).*

As to claim 3, Te Velde teaches a backplane according to claim 2 further comprising a capacitor electrode disposed adjacent the first electrode such that the capacitor electrode and the first electrode form a capacitor *(a first picture electrode 3 and a second picture electrode 6 form a capacitor as showed in fig. 5).*

As to claim 4, Te Velde teaches a backplane according to claim 1 further comprising an encapsulant layer covering the micromechanical switch *(a covering hood 26 covers the micromechanical leaf spring 25, as discussed in figure 9, lines 8, lines 11-14).*

5. **As to claim 5**, Te Velde teaches an electro-optic display comprising:

a layer of an electro-optic medium having first and second display states differing in at least one optical property, the electro-optic medium being capable of being changed from its first to its second display state by application of an electric field to the medium *(a liquid crystal 8, as discussed in col. 2, lines 13-20);* and

a backplane disposed adjacent the layer of electro-optic medium, the backplane comprising a pixel electrode arranged, upon application of a voltage thereto, to apply an electric field to the electro-optic medium, the backplane further comprising a voltage supply line arranged to supply a voltage to the pixel electrode, and a micromechanical switch disposed between the voltage supply line and the pixel electrode, the micromechanical switch having an open state, in which the voltage supply line is not electrically connected to the pixel electrode, and a closed state, in which the voltage supply line is electrically connected to the pixel electrode *(the array of associated row electrodes 4 and column electrodes 7 form the backplane of the display, as discussed in*

col. 5, lines 12-42, a micromechanical leaf spring 5 arranged between the scan electrode 4 and the picture electrode 3, as disclosed in fig. 7b, col. 7, lines 60-65, and the operation of display device as discussed in col. 6, line 44 through col. 7, line 47).

As to claim 6, Te Velde teaches an electro-optic display according to claim 5 wherein the micromechanical switch comprises a cantilever beam capable on moving into and out of contact with a first electrode, and a second electrode arranged to move the cantilever beam *(the micromechanical leaf spring 5, a first electrode is the picture electrode 3, a second electrode is the scan electrode 4, and an extra contact point 17, as discussed in fig. 7a, col. 7, lines 48-52).*

As to claim 7, Te Velde teaches an electro-optic display according to claim 6 wherein the backplane further comprises a capacitor electrode disposed adjacent the first electrode such that the capacitor electrode and the first electrode form a capacitor *(a first picture electrode 3 and a second picture electrode 6 forms a capacitor as showed in fig. 5).*

As to claim 8, Te Velde teaches an electro-optic display according to claim 5 further comprising an encapsulant layer covering the micromechanical switch *(a covering hood 26 covers the micromechanical leaf spring 25, as discussed in figure 9, lines 8, lines 11-14).*

As to claim 9, Te Velde teaches an electro-optic display according to claim 5 further comprising a light transmissive electrode disposed on the opposed side of the layer of electro-optic medium from the backplane *(a transparent strip-shaped row*

electrode 4 is provided between the rows of picture electrode which is opposed to the column electrode 7, as discussed in fig. 1, col. 5, lines 27-30).

As to claim 10, Te Velde teaches an electro-optic display according to claim 5 wherein the electro-optic medium is an electrochromic medium *(an electro-optical medium applied electrochromic materials, as discussed in col. 10, lines 62-67).*

As to claim 11, Te Velde teaches an electro-optic display according to claim 5 wherein the electro-optic medium is an encapsulated electrophoretic medium *(an electro-optical medium applied electrophoretic suspensions, as discussed in col. 10, lines 62-67).*

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN M. NGUYEN whose telephone number is 571-272-7697. The examiner can normally be reached on MON-THU from 8:00-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, a supervisor RICHARD A. HJERPE can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the Patent Application Information Retrieval system, see http://portal.uspto.gov/external/portal/pair. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin M. Nguyen
Patent Examiner
Art Unit 2629

KMN
April 5, 2007